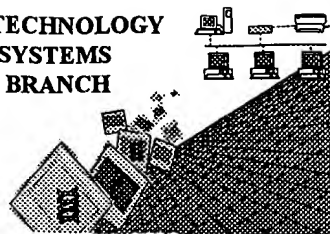


BIOTECHNOLOGY
SYSTEMS
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1641
#26
NA

RAW SEQUENCE LISTING
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DATE: 09/27/2002

PATENT APPLICATION: US/09/134,333A

TIME: 14:15:40

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Output Set: N:\CRF4\09272002\I134333A.raw

pp. 2-3
Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: LONGACRE-ANDRE, SHIRLEY
4 ROTH, CHARLES
5 NATO, FARIDABNO
6 BARNWELL, JOHN
7 MENDIS, KAMINI
9 <120> TITLE OF INVENTION: RECOMBINANT PROTEIN CONTAINING A C-TERMINAL FRAGMENT OF
PLASMODIUM MSP-1
11 <130> FILE REFERENCE: 0660-0135-0XCIP
13 <140> CURRENT APPLICATION NUMBER: 09/134,333A
14 <141> CURRENT FILING DATE: 1998-08-14
16 <150> PRIOR APPLICATION NUMBER: PCT/FR97/00290
17 <151> PRIOR FILING DATE: 1997-02-14
19 <150> PRIOR APPLICATION NUMBER: FR96/01822
20 <151> PRIOR FILING DATE: 1996-02-14
22 <160> NUMBER OF SEQ ID NOS: 15
24 <170> SOFTWARE: PatentIn version 3.1
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 291
28 <212> TYPE: DNA
29 <213> ORGANISM: Artificial Sequence
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32 <223> OTHER INFORMATION: synthetic DNA
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36 <222> LOCATION: (1)..(291)
37 <223> OTHER INFORMATION:
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42 1 5 10 15
44 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt 96
45 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
46 20 25 30
48 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac 144
49 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
50 35 40 45
52 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc 192
53 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
54 50 55 60
56 acc gag gag gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt 240
57 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
58 65 70 75 80
60 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa 288
61 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser

DATE: 09/27/2002

TIME: 14:15:40

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73 <223> OTHER INFORMATION: synthetic DNA This is not a DNA sequence
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78 1 5 10 15
81 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
82 20 25 30
85 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
86 35 40 45
89 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
90 50 55 60
93 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
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98 85 90 95
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103 <212> TYPE: DNA
104 <213> ORGANISM: Plasmodium falciparum
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109 catttagatg aaagagaaga atgtaaatgt ttatttaaatt acaaacaaga aggtgataaa 120
111 tgtgttgaaa atccaaatcc tacttgtaac gaaaataatg gtggatgtga tgcagatgcc 180
113 aaatgtaccg aagaagattc aggtagcaac ggaaagaaaa tcacatgtga atgtactaaa 240
115 cctgattctt atccactttt cgatggtatt ttctgcagt 279
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119 <211> LENGTH: 354
120 <212> TYPE: DNA
121 <213> ORGANISM: Artificial Sequence
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126 <220> FEATURE:
127 <221> NAME/KEY: CDS
128 <222> LOCATION: (1)..(354)
129 <223> OTHER INFORMATION:
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134 1 5 10 15
136 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt 96
137 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
138 20 25 30
140 ctg ctg aac tac aaa caq qaq qqc qac aaq tgc qtq qaq aac ccc aac 144

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This is not a DNA sequence

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PATENT APPLICATION: US/09/134,333A

DATE: 09/27/2002

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142      35      40      45
144 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc      192
145 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
146      50      55      60
148 acc gag gag gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt      240
149 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
150 65      70      75      80
152 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc tcc      288
153 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser Ser
154      85      90      95
156 tct aac ttc ttg ggc atc tcg ttc ttg ttg atc ctc atg ttg atc ttg      336
157 Ser Asn Phe Leu Gly Ile Ser Phe Leu Leu Ile Leu Met Leu Ile Leu
158      100      105      110
160 tac agc ttc att taa taa      354
161 Tyr Ser Phe Ile
162      115
165 <210> SEQ ID NO: 5
166 <211> LENGTH: 116
167 <212> TYPE: PRT
168 <213> ORGANISM: Artificial Sequence
170 <220> FEATURE:
171 <223> OTHER INFORMATION: synthetic DNA
173 <400> SEQUENCE: 5
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176 1      5      10      15
179 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
180      20      25      30
183 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
184      35      40      45
187 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
188      50      55      60
191 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
192 65      70      75      80
195 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser Ser
196      85      90      95
199 Ser Asn Phe Leu Gly Ile Ser Phe Leu Leu Ile Leu Met Leu Ile Leu
200      100      105      110
203 Tyr Ser Phe Ile
204      115
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209 <212> TYPE: DNA
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215 catttagatg aaagagaaga atgtaaatgt ttattaaatt acaaaacaaga aggtgataaa      120
217 tgtgttgaaa atccaaatcc tacttgtaac gaaaataatg gtggatgtga tgcagatgcc      180
219 aaatgtaccg aagaagattc aggtagcaac ggaaagaaaa tcacatgtga atgtactaaa      240

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This is not a DNA sequence

*Please
correct this
error in
subsequent
sequences*

RAW SEQUENCE LISTING

DATE: 09/27/2002

PATENT APPLICATION: US/09/134,333A

TIME: 14:15:40

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221 cctgattctt atccactttt cgatgggtatt ttctgcagtt cctctaactt cttaggaata      300
223 tcattcttat taatactcat gttaatatta tacagtttca tt                          342
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227 <211> LENGTH: 387
228 <212> TYPE: DNA
229 <213> ORGANISM: Plasmodium falciparum
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233 <222> LOCATION: (1)..(387)
234 <223> OTHER INFORMATION:
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239 1          5          10          15
241 tgt caa tgt gaa aca gaa agt tat aag cag ctt gta gcc aac gtg gac      96
242 Cys Gln Cys Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp
243          20          25          30
245 gaa ttc aac atc tcg cag cac caa tgc gtg aaa aaa caa tgt ccc gag      144
246 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
247          35          40          45
249 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt      192
250 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
251          50          55          60
253 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac      240
254 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
255 65          70          75          80
257 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc      288
258 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
259          85          90          95
261 acc gag gag gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt      336
262 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
263          100         105         110
265 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa      384
266 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
267          115         120         125
269 taa                          387
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274 <212> TYPE: PRT
275 <213> ORGANISM: Plasmodium falciparum
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280 1          5          10          15
283 Cys Gln Cys Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp
284          20          25          30
287 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
288          35          40          45
291 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
292          50          55          60

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RAW SEQUENCE LISTING

DATE: 09/27/2002

PATENT APPLICATION: US/09/134,333A

TIME: 14:15:40

Input Set : A:\066001350XIP.txt

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295 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
296 65 70 75 80
299 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
300 85 90 95
303 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
304 100 105 110
307 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
308 115 120 125
311 <210> SEQ ID NO: 9
312 <211> LENGTH: 330
313 <212> TYPE: DNA
314 <213> ORGANISM: Plasmodium falciparum
316 <220> FEATURE:
317 <221> NAME/KEY: CDS
318 <222> LOCATION: (1)..(330)
319 <223> OTHER INFORMATION:
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324 1 5 10 15
326 atc tcg cag cac caa tgc gtg aaa aaa caa tgt ccc gag aac tct ggc 96
327 Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu Asn Ser Gly
328 20 25 30
330 tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt ctg ctg aac 144
331 Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn
332 35 40 45
334 tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac ccg acc tgt 192
335 Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn Pro Thr Cys
336 50 55 60
338 aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc acc gag gag 240
339 Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys Thr Glu Glu
340 65 70 75 80
342 gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt acc aaa ccc 288
343 Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys Thr Lys Pro
344 85 90 95
346 gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa taa 330
347 Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
348 100 105
351 <210> SEQ ID NO: 10
352 <211> LENGTH: 108
353 <212> TYPE: PRT
354 <213> ORGANISM: Plasmodium falciparum
356 <400> SEQUENCE: 10
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359 1 5 10 15
362 Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu Asn Ser Gly
363 20 25 30
366 Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn
367 35 40 45

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VERIFICATION SUMMARY

DATE: 09/27/2002

PATENT APPLICATION: US/09/134,333A

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